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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,664	12/22/2000	Kenneth A. Parulski	82038RLW	4789

7590 07/01/2005

Patent Legal Staff
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EXAMINER

JERABEK, KELLY L

ART UNIT PAPER NUMBER

2612

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/748,664

Applicant(s)

PARULSKI, KENNETH A.

Examiner

Kelly L. Jerabek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 and 18-20 is/are allowed.
- 6) ☒ Claim(s) 15-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 1/31/2005 have been fully considered but they are not persuasive.

Response to Remarks:

Applicant's arguments (Amendment page 7) state that claim 15 is amended to recite that the compensated image is discarded without generating a new updated compensated image and that the amended claim is different than the Examiner's position regarding the rejection of claim 15 on page 4 of the Office action, that in Niikawa each time a setting of a correctible item is changed a new updated compensated image is displayed. The Examiner agrees that amended claim 15 is different than the Examiner's interpretation according to the previous office action however, the combination of the Niikawa and Suzuki references also teaches the features of amended claim 15.

Niikawa discloses in figures 16A and 16B a digital camera (1) capable of displaying images. A user of the camera may input settings such as white balance, exposure compensation, and scene and contrast the captured image stored in memory with a corrected image (page 6, paragraphs 114-122). A captured image is retrieved

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from memory and displayed on EVF (20) and a copy of the image is displayed on LCD (10) (page 6, paragraphs 121-122). The camera (1) includes an LCD button (31) that is used to turn on/off the LCD display (10) and the EVF display (20) (page 2, paragraph 38). The digital camera (1) has four display modes that change when the LCD button (31) is pressed (table 1, pages 4-5 paragraphs 87-99). A user may input a setting of image correction such as white balance using buttons U,D,L, and R (page 6, paragraphs 123-126). The Examiner is reading the corrected image as a compensated image. Therefore, the user can modify the color balance of a copy of the original image to generate a compensated image. Furthermore, the original image (20a) is displayed on the EVF (20) while the compensated image (10a) is displayed on the LCD (10). Niikawa also states that during the operation of setting display (10b) about correctible items such as exposure compensation, white balance, and scene the user presses buttons in order to generate a corrected image (compensated image) (page 6, paragraph 126). Niikawa further states that when a setting of a correctable item is changed, the corrected image (10a) in which the changed setting is reflected appears on the LCD (10) and the captured image (20a) remains displayed on LCD (20). Also, if the image (10a) having a desired display characteristic is displayed on LCD (10), the user presses the OK button (32) to complete the input operation (ST 25) and upon completion of the operation the camera (1) returns to display mode "0" (LCD 10 on, LCD 20 off) (page 6, paragraphs 127-128). Thus, the compensated image is displayed on LCD (10) and the captured image is no longer displayed on LCD (20). Pressing LCD button (31) immediately after this process changes the display mode to "1" (LCD 10 off,

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LCD 20 on). Thus, ceasing displaying of the compensated image and discarding the compensated image without generating a new updated compensated image. Also, the captured image will remain stored in the camera regardless of the display mode.

Therefore, it can be seen that changing the display mode by pressing the LCD button (31) immediately after pressing the OK button (32) to complete an input operation at step (ST 25) will result in modifying the color balance of a copy of a stored image responsive to a color value to generate a compensated image, displaying the compensated image on the camera, and ceasing displaying of the compensated image discarding the compensated image without generating a new updated compensated image, and continuing storage of the stored image in the camera. Although Niikawa discloses generating a compensated image by adjusting the white balance (color balance) of a captured image, Niikawa fails to distinctly disclose measuring the color value of ambient illumination at a user interface of the camera and modifying the color balance of a captured image responsive to the measured color value of ambient illumination.

Suzuki discloses in figure 3 a white balance adjustment device for use with a video camera. The white balance adjustment device includes a color measurement unit (130) that receives light from the camera surroundings, analyzes it, and outputs signals to control circuit (110) (col. 4, lines 34-53). Since the color measurement unit (130) measures light from the camera surroundings it can be seen that the color value of all of the ambient light surrounding the camera is measured. The white balance adjustment means then adjusts the white balance of the output of the imaging means in accordance

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with the color value measured by the color measurement means (col. 4, lines 24-44).

Therefore, it would have been obvious for one skilled in the art to have been motivated to include the concept of adjusting the white balance of an image output from an imaging means based on the color value of the light source surrounding the camera as disclosed by Suzuki in the digital camera capable of simultaneously displaying a captured image and a compensated image that is corrected by a white balancing operation as disclosed by Niikawa. Doing so would provide a means for providing a white balance adjustment device that is capable of determining the type of light source used to illuminate the area surrounding a camera and performing a white balancing in accordance with such a determination (Suzuki: col. 2, lines 48-52).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Niikawa et al. US 2002/0171747 in view of Suzuki 5,691,772.

Re claim 15, Niikawa discloses in figures 16A and 16B a digital camera (1) capable of displaying images. A user of the camera may input settings such as white balance, exposure compensation, and scene and contrast the captured image stored in memory with a corrected image (page 6, paragraphs 114-122). A captured image is retrieved from memory and displayed on EVF (20) and a copy of the image is displayed on LCD (10) (page 6, paragraphs 121-122). The camera (1) includes an LCD button (31) that is used to turn on/off the LCD display (10) and the EVF display (20) (page 2, paragraph 38). The digital camera (1) has four display modes that change when the LCD button (31) is pressed (table 1, pages 4-5 paragraphs 87-99). A user may input a setting of image correction such as white balance using buttons U,D,L, and R (page 6, paragraphs 123-126). The Examiner is reading the corrected image as a compensated image. Therefore, the user can modify the color balance of a copy of the original image to generate a compensated image. Furthermore, the original image (20a) is displayed on the EVF (20) while the compensated image (10a) is displayed on the LCD (10). Niikawa also states that during the operation of setting display (10b) about correctible items such as exposure compensation, white balance, and scene the user presses buttons in order to generate a corrected image (compensated image) (page 6, paragraph 126). Niikawa further states that when a setting of a correctable item is changed, the corrected image (10a) in which the changed setting is reflected appears on the LCD (10) and the captured image (20a) remains displayed on LCD (20). Also, if the image (10a) having a desired display characteristic is displayed on LCD (10), the user presses the OK button (32) to complete the input operation (ST 25) and upon

completion of the operation the camera (1) returns to display mode "0" (LCD 10 on, LCD 20 off) (page 6, paragraphs 127-128). Thus, the compensated image is displayed on LCD (10) and the captured image is no longer displayed on LCD (20). Pressing LCD button (31) immediately after this process changes the display mode to "1" (LCD 10 off, LCD 20 on). Thus, ceasing displaying of the compensated image and discarding the compensated image without generating a new updated compensated image. Also, the captured image will remain stored in the camera regardless of the display mode. Therefore, it can be seen that changing the display mode by pressing the LCD button (31) immediately after pressing the OK button (32) to complete an input operation at step (ST 25) will result in modifying the color balance of a copy of a stored image responsive to a color value to generate a compensated image, displaying the compensated image on the camera, and ceasing displaying of the compensated image discarding the compensated image without generating a new updated compensated image, and continuing storage of the stored image in the camera. Although Niikawa discloses generating a compensated image by adjusting the white balance (color balance) of a captured image, Niikawa fails to distinctly disclose measuring the color value of ambient illumination at a user interface of the camera and modifying the color balance of a captured image responsive to the measured color value of ambient illumination.

Suzuki discloses in figure 3 a white balance adjustment device for use with a video camera. The white balance adjustment device includes a color measurement unit (130) that receives light from the camera surroundings, analyzes it, and outputs signals

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to control circuit (110) (col. 4, lines 34-53). Since the color measurement unit (130) measures light from the camera surroundings it can be seen that the color value of all of the ambient light surrounding the camera is measured. The white balance adjustment means then adjusts the white balance of the output of the imaging means in accordance with the color value measured by the color measurement means (col. 4, lines 24-44). Therefore, it would have been obvious for one skilled in the art to have been motivated to include the concept of adjusting the white balance of an image output from an imaging means based on the color value of the light source surrounding the camera as disclosed by Suzuki in the digital camera capable of simultaneously displaying a captured image and a compensated image that is corrected by a white balancing operation as disclosed by Niikawa. Doing so would provide a means for providing a white balance adjustment device that is capable of determining the type of light source used to illuminate the area surrounding a camera and performing a white balancing in accordance with such a determination (Suzuki: col. 2, lines 48-52).

Re claim 16, the color measurement unit (130) disclosed by Suzuki receives light from the camera surroundings and analyzes it into a red component (Rb), a green component (Gb), and a blue component (Bb) and outputs signal currents (col. 4, lines 34-53). The red, green, and blue components are based on the luminance of the ambient illumination for each of the respective colors.

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Re claim 17, the white balance adjustment switches (120,220,320) disclosed by Suzuki serve to select a white balance adjustment mode according to the kind of light source used to illuminate the subject. Color measurement units (130,230,330) then measure the color aspects of the light source used to illuminate the subject and control units (110,210,310) fluorescent lamp discrimination units (140,240,340) and variable amplifiers (104,204,304) are used to adjust the white balance (color balancing to a neutral balance) of the output of the imaging means in accordance with the adjustment mode selected and in accordance with the color value measured by the color measurement units (col. 5, lines 24-44).

Allowable Subject Matter

Claims 1-13 and 18-20 allowed.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fail to anticipate or render obvious the following technical features as recited in the highlighted claims:

Referring to claims 1-13, the prior art fails to teach or suggest " A camera comprising: ...a color adjuster including a user interface ambient light detector and an image display mounted on said body adjacent said sensor".

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Referring to claims 18-19, the prior art fails to teach or suggest "A method for displaying images on a camera comprising the steps of...wherein modifying further comprises determining a white balance color space vector defining a white balancing of said stored image from said color value to a white point for a predetermined scene illuminant; determining a reverse color space vector originating at said color value and extending opposite said white balance color space vector; and color balancing said copy at a compensation poring located on said reverse color space vector".

Referring to claim 20, the prior art fails to teach or suggest "A method for displaying images on a camera comprising the steps of ...wherein said modifying further comprises matching said color value to one of a plurality of reference illuminants to provide an assigned reference illuminant, each said reference illuminant having a different correlated color temperature; and color balancing said copy to a neutral point at the correlated color temperature of said assigned reference illuminant to provide a verification image".

Contacts


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is **(571) 272-7312**. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on **(571) 272-7308**. The fax phone number for submitting all Official communications is 703-872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at **(571) 273-7312**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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